

इंटरनेट

मानक

### Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 11567-1 (1986): Holes and Slots for Metal Bone Plates, Part 1: Corresponding to Screws with Asymmetrical Thread and Spherical Under-Surfaces [MHD 2: Orthopaedic Instruments, Implants and Accessories]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE



*Indian Standard*

**SPECIFICATION FOR  
HOLES AND SLOTS FOR METAL BONE PLATES  
PART 1 CORRESPONDING TO SCREWS WITH ASYMMETRICAL  
THREAD AND SPHERICAL UNDER-SURFACES**

**1. Scope** — Specifies the dimensions and tolerances of holes in bone plates used as surgical implants to facilitate correct fixing using screws conforming to IS : 9829 ( Part 1 )-1981 'Metal bone screws: Part 1 Screws with asymmetric thread, variable fitting ( spherical )'.

**Note** — This part of the standard only deals with the dimensions and tolerances of holes and not with spacing of the holes and dimensions of the plates.

**2. Dimensions and Tolerances** — The dimensions and tolerances of four types of holes are given in Fig. 1 to 4.

**3. Workmanship and Finish**

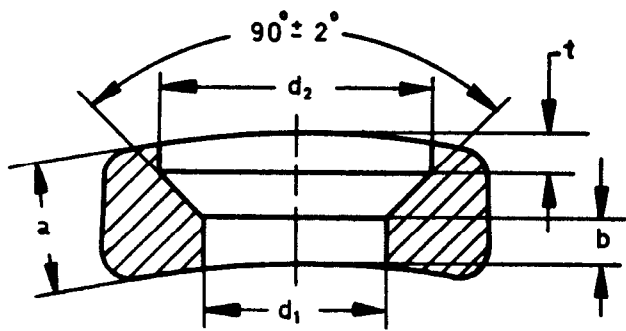
**3.1** The holes shall be well formed and clean.

**3.2** The holes shall be free from surface defects, such as pit-holes, cracks, burrs and impregnated foreign particles.

Adopted 21 March 1986

© September 1986. ISI

Gr 2

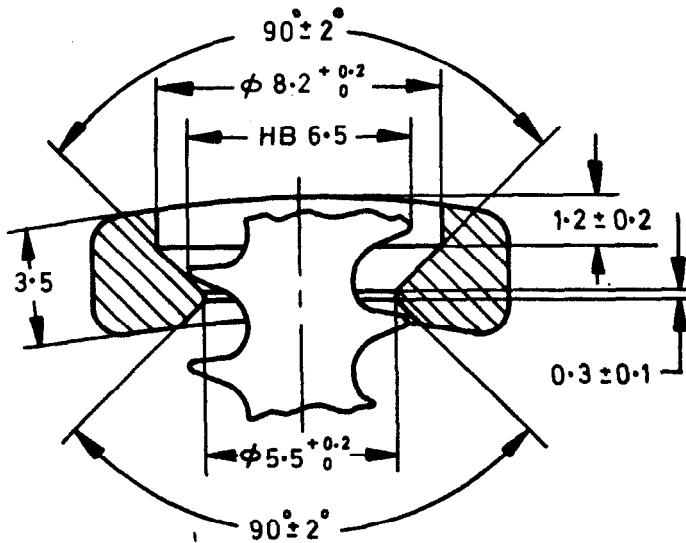


$d_1$ $+0.2$ 0	$d_2$ $+0.2$ 0	$b$ min.	Cylindrical part of countersink (dependent on $a$ )†		Provided for screws conforming to IS : 9829 (Part 1)-1981  Code number
			$t$ $+0.2$ 0	$a$	
1.6	3.1	0.15	0.2	1.3	HA 1.5
1.9	3.2	0.25			
2.1	4.1	0.10			
2.6	4.3	0.25	0.2	1.5	HA 2
2.9	5.2	0.15			
3.4	5.4	0.30			
3.7	6.2	0.25	0.4	1.9	HA 2.7
4.2	6.4	0.40			
4.7		0.35			
5.2		0.6	0.7	2.4	HA 3.5 HA 4
5.5	8.2	0.75			HB 4
6		1			
6.6*		1.3			
			1.2	3.5	HA 4.5
					HA 5
					HB 6.5

\*This value in exceptional cases only.  
†When effective plate thickness is smaller than value  $a$ , than  $t$  will decrease proportionally to zero.

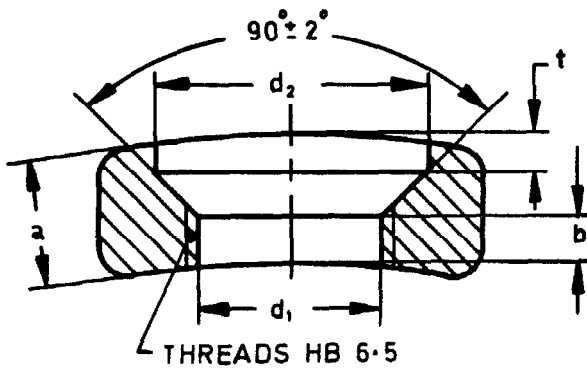
All dimensions in millimetres.

FIG. 1 CYLINDRICAL HOLE



All dimensions are in millimetres.

FIG. 2 CONICAL HOLE OF SCREWS HB 6.5

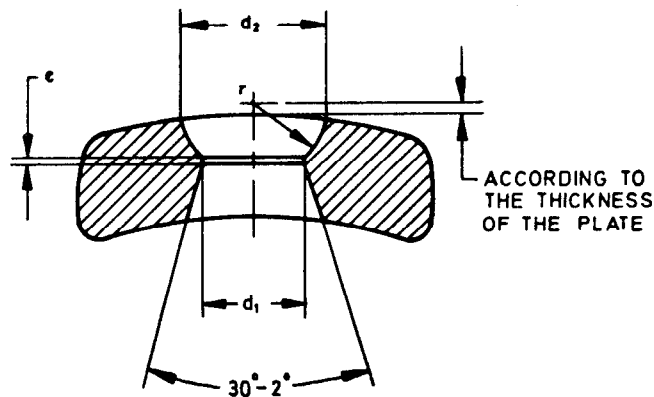


$d_1$ $+0.2$ 0	$d_2$ $+0.2$ 0	$b$ Min.	Cylindrical part of countersink (dependent on $a$ )*	
			$t$ $+0.2$ 0	$a$
4.7	8.2	0.35	1.2	3.5
5.5		0.75		

\*When effective plate thickness is smaller than value  $a$ , then  $t$  will decrease proportionally to zero.

All dimensions in millimetres.

FIG. 3 CONICAL HOLE WITH THREAD FOR SCREWS HB 6.5



$d_1$ $+0.2$ 0	$d_2$ $+0.2$ 0	$r$ $+0.1$ 0	$e$ $+0.15$ 0	Provided for screws conforming to IS : 9829 (Part 1)-1981 Code number
3.2	5	2.5	0.2	HA 2.7
4.2	6	3	0.2	HA 3.5
				HB 4
4.7	8	4	0.4	HA 4
5.2	8	4	0.4	HA 4.5
5.9	8	4	0.4	HA 5
5.9*	8	4	0.4	HB 6.5
*Threaded HB 6.5				

All dimensions in millimetres.

FIG. 4 HOLE WITH SPHERICAL COUNTERSINK

## EXPLANATORY NOTE

In the preparation of this standard, considerable assistance has been derived from ISO/DP 5836/1 Implants for Surgery — Metal bone plates — Part 1 Holes corresponding to screws with asymmetrical thread and spherical under-surfaces, issued by International Organization for Standardization.